of this drug in the therapy of the diabetic. In this context, we would point to the following information:

1. Apparently spontaneous lactic acidosis, with frequent fatal termination, has occurred in diabetic patients being treated with phenformin alone, in whom there was no evidence of other potential cause of lactic acidosis.

2. Among therapeutic agents being given to diabetic patients who have developed a catastrophic illness which led to lactic acidosis, there is a greater association with the use of phenformin than with any other therapeutic agent, by a very wide margin.

3. *In vivo* human studies exist which validate the existence of elevated resting blood lactate in patients receiving phenformin and which indicate that lactic acid is produced in increased amounts by diabetic patients given phenformin acutely.[8,9]

4. Phenformin is metabolized by the liver and excreted in the urine. Seventeen of 18 reported cases of lactic acidosis in patients taking phenformin, in whom estimates of renal function are available, show evidence of impaired renal function at the onset of their lactic acidosis.

5. Three patients with lactic acidosis, who had been receiving phenformin were shown to have elevated levels of blood phenformin in concentration capable of inducing increased lactate production by tissues in *in vitro* experiments.[8]

For these reasons, and until unequivocal evidence can be presented to the contrary, we are of the opinion that there is a relationship between the incidence of lactic acidosis and the use of phenformin in the treatment of diabetes mellitus. It would appear that the hazard is greatest among patients who have impaired renal function and those who are subjected to other causes of lactic acidosis, such as severe gram-negative infection or acute myocardial infarction. We therefore recommend that reemphasis be given to the current instructions packaged with this drug to the effect that phenformin is contraindicated in patients who have impaired renal function, and in the presence of other significant acute illness, chronic infection, and acute or chronic heart disease.

It should be pointed out that a significant number of patients who developed lactic acidosis while on phenformin had the onset of lactic acidosis accompanied by nausea and vomiting and abdominal pain. The occurrence of these symptoms in any diabetic taking phenformin should lead to the immediate discontinuation of the drug and careful observation of the patient for metabolic acidosis.

Therapy of lactic acidosis remains empirical. Therapeutic modalities reported to date include the correction of the metabolic acidosis with the use of large amounts of sodium bicarbonate intravenously, peritoneal dialysis, methylene blue, glucose and insulin, and tromethamene (THAM®). Additionally it is agreed that measures designed to maintain intravascular volume, tissue oxygenation, cardiac function and control of infection are important in the management of this condition. Experience indicates that correction of the acidosis with intravenous sodium bicarbonate, along with detailed attention to the correction of identifiable defects in hydration, hemoglobin levels, cardiac function, tissue oxygenation and control of infection are the most significant contributors to survival of these patients. The other therapeutic modalities (methylene blue, THAM, glucose and insulin) await further confirmation.

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A Physician Is Worthy of His Hire

A WORKMAN IS worthy of his hire. This has long been an important tenet of our national philosophy. Our society today also holds that discrimination is an evil thing. Whenever discrimination is suspected or exposed, there is apt to be a great public outcry accompanied by demands that the

situation be corrected. Government and the courts are generally sympathetic to those who are victims of discrimination.

But in certain quarters, physicians are thought of as being somehow different. The same government and the same labor unions who stand steadfastly against the payment of anything less than prevailing wages in every *other* aspect of health care services, apparently have chosen to make a special case of physicians' fees. By various devices they persistently seek to reduce or to curtail the fees paid for services rendered by physicians, perhaps in the forlorn hope that by this means they will somehow be able to control the skyrocketing costs of medical care. A case in point is the current limitation of payments to the "60th percentile" in the Medi-Cal program. Another is the recent "freeze" on Medicare Part B payments until 1970. The result of these attitudes and efforts is not only discriminatory against essential members of the health care team, but more importantly, it should not be overlooked that since in the long run one gets about what one pays for, sooner or later this will lessen the quality of the services received by the beneficiaries.

The problem is complex. The need to be able to predict costs to a reasonable degree is essential to sound financing, whether a program be governmental or in the private sector, but the laborer is also worthy of his hire. Physicians, like attorneys, who also render personal professional services, feel that as individuals they have some right to place a value upon the work they have performed, a value which may be quite different in different circumstances. Yet it is only right that this value bear some relationship to what others would charge for similar services in similar circumstances. To many, mostly outside the profession, standardized fee schedules seem to be the only answer. Fixed salaries for physicians appeals to others, and again those others are mostly outside the profession. The former approach would tend to standardize the level of care more or less at the level of the standardized fee, which experience shows is more often low than high. The latter causes the physician to be working for someone other than the patient and to this extent may lessen his sense of responsibility to an individual patient. Neither particularly encourages excellence or rewards service above and beyond the ordinary. Most physicians believe that in the long run individual fee for service best serves the patient and that it tends to promote better medical practice. However, there must be reasonable restraint and reasonable control.

Organized medicine in California has played a leading role in what appear to be increasingly successful efforts to find means to provide for flexibility, predictability and reasonable control of abuse in the charges physicians make for professional services with minimal interference with traditional individual fee for service rendered. Two reports elsewhere in this issue of CALIFORNIA MEDICINE (pages 337 and 342) recount important progress. The related concepts of "usual," "customary," and "reasonable" which have been developed and refined by the California Medical Association were adopted by the American Medical Association last Fall. And recently California Blue Shield has introduced a new "Physician Profile System" which applies the earlier concepts in what appears to be practical fashion.

This progress is significant in that it should make possible the reconcilement of traditional individual fee for service with acknowledged necessity for reasonable predictability and control of abuse in the aggregate of physicians' charges. The machinery is now available to avoid the discrimination which is now all too prevalent. Let's have some more fair play in the matter of physicians' fees. The physician like any other workman is worthy of his hire.

On Polluting the Biosphere

WE ARE JUST beginning to sense the enormity of man's capability to inflict discomfort and even destruction upon himself and his descendants through pollution of planet Earth and its atmosphere. It is awesome to hear it said that DDT, a chemical introduced by man on a wide scale less than three decades ago, can now be detected in any sample of water drawn from any ocean in any part of the world. Solid wastes have also begun to accumulate alarmingly. With respect to the atmosphere, Starkman elsewhere in this issue of CALIFORNIA MEDICINE (page 309) notes that emissions from automotive vehicles are largely responsible